

C-SiC Honeycomb for Advanced Flight Structures, Phase I

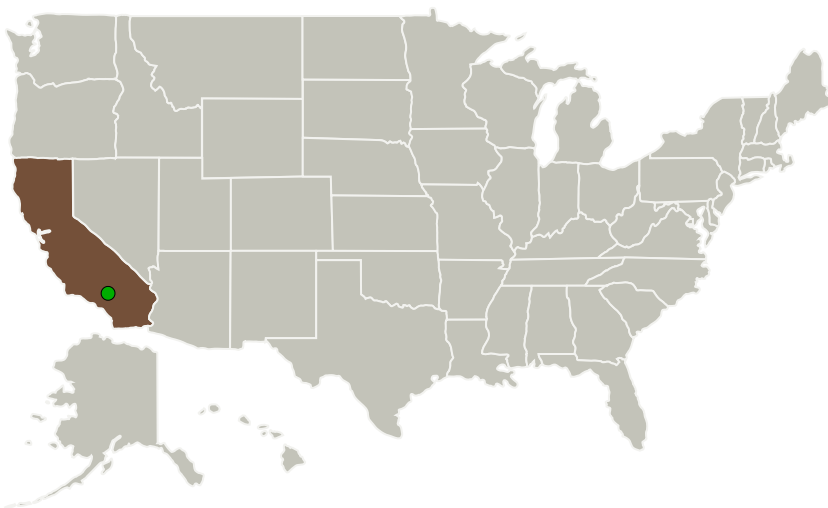
Completed Technology Project (2010 - 2010)



Project Introduction

The proposed project is to manufacture a C-SiC honeycomb structure to use as a high temperature material in advanced aircraft, spacecraft and industrial applications. The proposers will fabricate a carbon fiber honeycomb structure. The structure will be charred and then converted to C-SiC by means of chemical vapor infiltration. The resultant material will then be tested mechanically at ambient, at high temperature and then at ambient after high temperature exposure.

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
Ultracor	Lead Organization	Industry	Livermore, California
● Armstrong Flight Research Center(AFRC)	Supporting Organization	NASA Center	Edwards, California

Primary U.S. Work Locations


California


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Project Transitions

 **January 2010:** Project Start

 **July 2010:** Closed out

Closeout Summary: C-SiC Honeycomb for Advanced Flight Structures, Phase I Project Image

Closeout Documentation:

- Final Summary Chart Image(<https://techport.nasa.gov/file/140522>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Ultracor

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

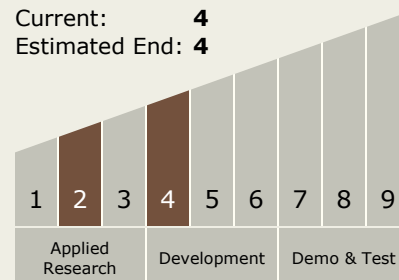
Carlos Torrez

Principal Investigator:

Stanley N Wright

Technology Maturity (TRL)

Start: 2
Current: 4
Estimated End: 4



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Technology Areas

Primary:

- TX14 Thermal Management Systems
 - └ TX14.2 Thermal Control Components and Systems
 - └ TX14.2.4 Insulation and Interfaces

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System